	sel-	1-00	,									
Work Ord Wednesday, Ju			;	*12	1777*							Page 1
Item ID: Revision ID: Item Name:	D3457-1 Washer			Accept	*N900	)040	100	ገ*	Setup	Start Stop	171	S1* S2*
Start Date: Required Date	7/02/14	Start Qty: 24.0	<i>,</i> -		Cust Item							
Reference:	. 7/02/14	Req'd Qty: 24.0	*24*		Customer:							
Approvals:		s Plan: MCS		Tooling: SPC (Y/N):		ate:			Run	Start Stop	^1\	R1*
Sequence ID/												R2*
Work Center 1	D	Operation Description	•	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accep Qty	t Re Qt		Reject Number	Insp. Stamp
Draw Nbr		Revision Nbr		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		<del>.</del>				<u>,                                    </u>		
D3457		Rev A										
100 <b>*1</b>		DOOSAN LATHE		0.00				24				14-8-13
110 <b>*11 \^</b>		Turn as p  QC2- Inspect parts of	per Folio FA589 Rev: ∭_ &	Dwg D3457 Rev: <u>A</u> 0.00	_					,		a 11 7 19
QC Quality Control		Memo		0.00								<u> 21-14-8-13</u>

120

QC8- Inspect parts - second check

0.00

\*120\*

Quality Control

Memo

0.00

24 Ø

DQA:			Date:											TART
						WORK ORDER NON	-CC	ONFO	RMANCE / UPDATE				_	AEROSPACE
QA Closed:			Date:							W	ork Order up	date only		
Work Orde	or.					DISPOSITION			AGA	AINST DE	PARTMENT	/PROCESS	•	
WOIK OIG	٠	· · · · · · · · · · · · · · · · · · ·	•	,		Rework	1		Skid-tube Cross	stube	1	Water Jet		Engineering
Part N	No.					Scrap			<b>├</b> ──	Il Fab	Pro	d. Eng. Coor.		Quality
	•					Use-as-is		Therr	noforming Finis	shing	Rec/Store/Packaging Supplier			Other
NCR I	No.		<del>-</del>			Suspected Unapproved	]	Large Fab Compos			]			
Root	-				Desc	ription of work order update		Initial	Action		Sign &			
Cause		Date	Step	Qty		or non-conformance	Ch	nief Eng	Description		Date	Verification		QC Inspector
Design														
Doc/Data						,					!			
Equip/Tooling														
Handling/Pre	Ш											•		
Material	Ш													
Operator	Ш						l							
Offset/Setup	Ш												l	
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Supplier	Ш													
Training														
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Unapproved			<u> </u>	l	<u> </u>			LUT CA	TECODY				<u>.</u>	
							FA	ULI CA	TEGORY					
Landi		1	٠.		Г	General Bend		ادمانه ۱	Program		Outside Dim	ensions	$\neg$	Pressure/Forced
		Bending	-+ C		-	BOM/Route	-	Grain	Flogram		Over/Under	t t	—	Set-up
	H	Centre No Cracks	or conce	HUIC	<u> </u>	Broken/Damage/Defect	$\vdash$	Hardwa	ara	-	Part Incorre	1	-	Temperature/Cure
	$\vdash$	Cracks Crimp/Kir	ak/Pinnla	Mayo	-	Burrs			ion Incomplete/Unqualified	d -	Part Lost/Mi			Weld
	-	Cuffs	ik/vihbie	e/ wave		Contamination	$\vdash$	<b>-</b> 1 '	tions Incomplete/Unclear	"	Part Moved	8	-	Wrong Stock Pulled
	-	Crushing			$\vdash$	Countersink	<b> </b>	4	gned/off center		Positioned V	ا Vrong		3
*:	$\vdash$	Heat Trea	at		-	Cut Too Short		Mislab	=		Power Loss/	_		Other
	$\vdash$	Inspectio		Tube	<u> </u>	Drawing		Misrea		L	<b>-</b>	<del>*</del> '		
		Marks/Ch	•			Drill Holes	<b> </b>	Off-set						
	$\vdash$	Turning S				Finish		-1	Calibration			<del>.</del>		
		Wave/Tw				Fit/Function		-	Sequence	٠				

Work Order ID 121777	W	ork	Order	ID	121777
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Quality Control

\*121777\*

Page 2 Wednesday, July 02, 2014 3:34:15 PM Item ID: D3457-1 Accept \*N900040100\* Setup Start **Revision ID:** Stop **Item Name:** Washer **Start Date:** 7/02/14 **Start Qty: 24.00** \*24\* **Cust Item ID:** Required Date: 7/02/14 Req'd Qty: 24.00 \*24\* **Customer:** Reference: Run Start Process Plan: Approvals: Date: Tooling: Date: Stop Date:\_\_\_\_\_ SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Accept Reject Reject Insp. **Work Center ID Description Run Hours** Code Qty Qty Number Stamp 130 Identify as per dwg & Stock Location: 57C DAS AUG 1 3 2014 \*130\* Packaging 0.00 Memo Packaging 140 QC21- Final Inspection - Work Order Release 0.00 \*140\* QC

0.00

Memo

MLJ 14-08-15 MLJ 14-08-14

DQA:			. Date:			-			_				
						WORK ORDER NON-	-CC	ONFOR	RMANCE / UI			–	AEROSPACE
QA Closed:			Date:							V	Vork Order u	odate only	
						DISPOSITION				AGAINST D	EPARTMENT	/PROCESS	
Work Orde	er: <b>-</b>					Dawe at			المطيية لعندات	Crosstube	1	Water Jet	Engineering
Dank N	١_					Rework			Skid-tube Machining	Small Fab	⊢ Pro	d. Eng. Coor.	Quality
Part N	10.			· · ·		Scrap Use-as-is			noforming	Finishing	<b>—</b>	re/Packaging	Other
NCR N	l۵					Suspected Unapproved	-    '''e'		Large Fab Composite			Supplier	┦
NCKIV	٠٠.	·				Suspected Onapproved			carge ran				
Root					Desc	ription of work order update	1	nitial	Act	ion	Sign &		
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Descr	iption	Date	Verification	QC Inspector
Design													
Doc/Data													
Equip/Tooling										·			
Handling/Pre													
Material 💥 🧍		* *											
Operator				Ì									
Offset/Setup	_	<b>.</b>											
Process												•	
Supplier							1		,				
Training													
Transport							l						
Unapproved		<u>.</u> <u>-</u>			<u> </u>			UT CAT	TECODY				<u>l </u>
1 42						General	FA	ULI CA	rEGORY				
Landir [	_	Ì				Bend		lealia/B	rogram	Г	Outside Dim	nensions [	Pressure/Forced
}	_	Bending Centre No	ot Concor	atric	-	BOM/Route	H	Grain	TOBIUM	<u> </u>	Over/Under	F-	Set-up
		Cracks	ot concer	III IC	-	Broken/Damage/Defect		Hardwa	re	· þ	Part Incorre	-	Temperature/Cure
	-	Crimp/Kir	nk/Rinnla	/\Maya	$\vdash$	Burrs	$\vdash$	4	ion Incomplete/Ur	ngualified	Part Lost/M	<b>-</b>	Weld
	_	Cuffs	Ικγινιρρία	y wave		Contamination		4 .	ions Incomplete/l	· -	Part Moved		Wrong Stock Pulled
		Crushing			<b> </b>	Countersink		_	ned/off center		Positioned \	L	
	-	Heat Trea			<u> </u>	Cut Too Short		Mislabe		ļ-	Power Loss,		Other
	_	Inspectio		Tube		Drawing		Misread		_	·		
[	${}$	Marks/Ch				Drill Holes		Off-set					
		•				Finish		4	Calibration				
						Fit/Function		Out of Sequence					

Page 1

Work Order ID: 121777

\*121777\*

Parent Item:

D3457-1

\*D3457-1\*

Parent Item Name:

Washer

**Start Date: 7/02/14** 

Required Date: 7/02/14

**Start Qty: 24.00** 

Required Qty: 24.00

**Comments:** 

IPP A05.10.03New issueKJ/JLM

IPP Rev:B Now on Doosan Lathe 08-10-30 JLM Verified By:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MDELRINR1.000		Purchased	No	•		100	f	3.3830	0.0208	1	<del></del>	<u> </u>	-
*MDFI RIN Delrin Round Bar 1" color:		)*							**		JL 14	-8-13	

Location Loc Qty Loc Code MAT039 3.383 m128667 3.383

DQA:		,	Date:											-	TART
QA Closed:			Date:			WORK ORDER NON	-C(	ONFO	RMANCE / UF		Work O	rder ut	odate only	_	AEROSPACE
QA Closeu.			Date.												
Work Ord	er:					DISPOSITION				AGAINST I	DEPART	MENT,	/PROCESS		
	-				<del></del>	Rework			Skid-tube	Crosstube			Water Jet	E	ngineering
Part I	۷o.					Scrap			Machining	Small Fab			d. Eng. Coor.	_	Quality
						Use-as-is		Thern	noforming	Finishing	R	ec/Sto	re/Packaging	_	Other
NCR I	No.					Suspected Unapproved	]		Large Fab	Composite	┛ .		Supplier		
Root					Desc	ription of work order update		Initial	Acti	on	Si	gn &			
Cause		Date	Step	Qty_		or non-conformance	Ch	nief Eng	Descri	ption		ate	Verification	<u> </u>	QC Inspector
Design	Ш														
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Equip/Tooling										•			ļ		
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Material	Ш						i								
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Offset/Setup	Щ	·													
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Oliappioved			<u>.</u>	L	<u> </u>		FA	ULT CA	TEGORY						
Landi	ng G	iear		· · · · · · · · · · · · · · · · · · ·		General									
		Bending				Bend		Folio/F	Program		Outs	ide Dim	nensions	Pro	essure/Forced
	П	Centre N	ot Conce	ntric		BOM/Route	Г	Grain			Ove	r/Under	tolerance	Se	t-up
	П	Cracks				Broken/Damage/Defect		Hardwa	are		Part	Incorre	ci	Te	mperature/Cure
		Crimp/Ki	nk/Ripple	/Wave		Burrs		Inspect	ion Incomplete/Un	qualified	Part	Lost/M	issing	—	eld
		Cuffs				Contamination		Instruct	tions Incomplete/U	Inclear	Part	Moved		w	rong Stock Pulled
		Crushing				Countersink		Misali	gned/off center		_	tioned \		_	
		Heat Trea	at			Cut Too Short	L	Mislabe			Pow	er Loss/	/Surge	Ot	her
		Inspectio	n Strip in	Tube		Drawing		Misrea							
		Marks/Cl	natter			Drill Holes	L	Off-set						_	
		Turning S			L	Finish	L	-	Calibration						
		Wave/Tw	vist in Tul	be		Fit/Function		Out of	Sequence						

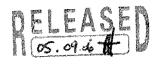
DART AEROSPACE LTD	Work Order:	121777
Description: Washer	Part Number:	D3457-1
Inspection Dwg: D3457 Rev: A		Page 1 of 1

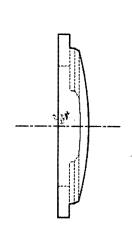
FIRST ARTICLE INSPECTION CHECKLIST Χ **First Article Prototype Drawing** Actual Method of **Tolerance** Accept Reject **Comments** Inspection **Dimension Dimension** 545 R1.575 +/-0.010  $0.030 \times 0.030$ +/-0.010 03 X.03 528 0.530 +/-0.010 0.063 +/-0.010 -062 0.169 +/-0.010 .167 Ø0.655 +/-0.010 Ø1.000 +/-0.010 DAS 44 Measured by: N/A Audited by: **Prototype Approval:** 9-89 Date: Date: 14/08/13 Date: N/A

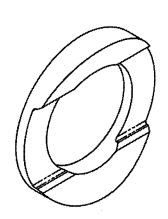
Rev	Date	Change	Revised by	Approved
Α	08.11.28	New Issue	KJ/EC	N/



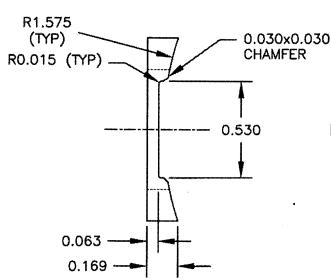
DESIG	CP	DRAWN BY CP	DART	AEROSPACE USA, INC.
CHEC	(ED //	APPROVED	DRAWING NO.	REV. A
	TIC	T	D3457	SHEET 1 OF 1
DATE			TILE	SCALE
 05.0	9.06		WASHER	2:1
 A		05.09.06	NFW ISSI	JF

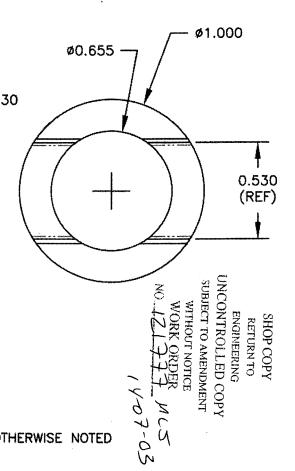






ISOMETRIC DETAIL





## **D3457-1 WASHER**

- 1) MATERIAL: DELRIN (DART SPEC. M-DELRIN-R)
- 2) FINISH: NONE
- 3) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

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